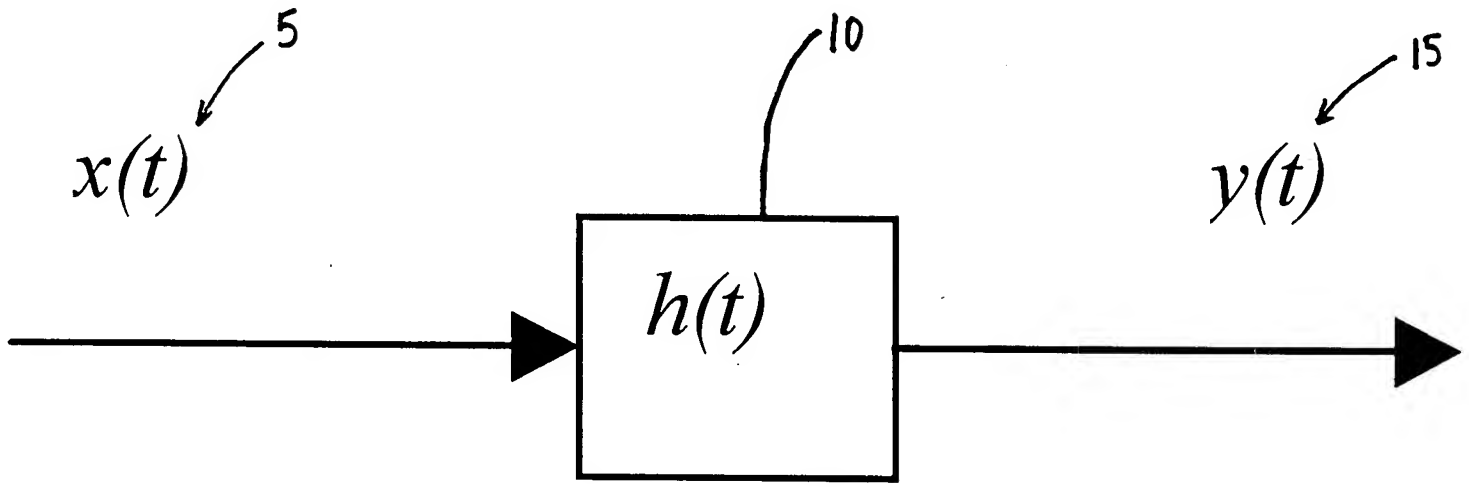
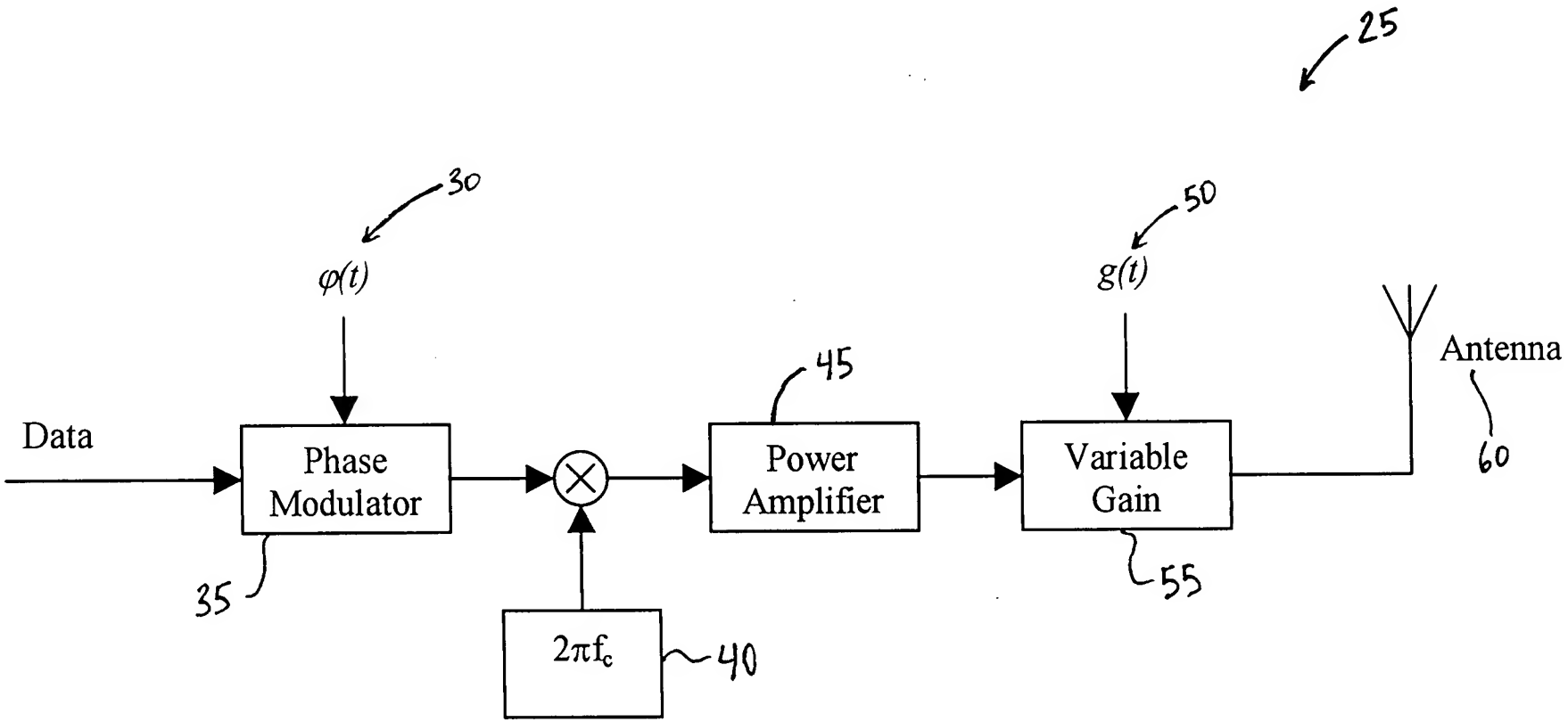


$$y(t) = x(t) \otimes h(t) = \int_{-\infty}^{\infty} x(t-\tau) \cdot h(\tau) d\tau$$

Filtering in the time domain

FIG. 1

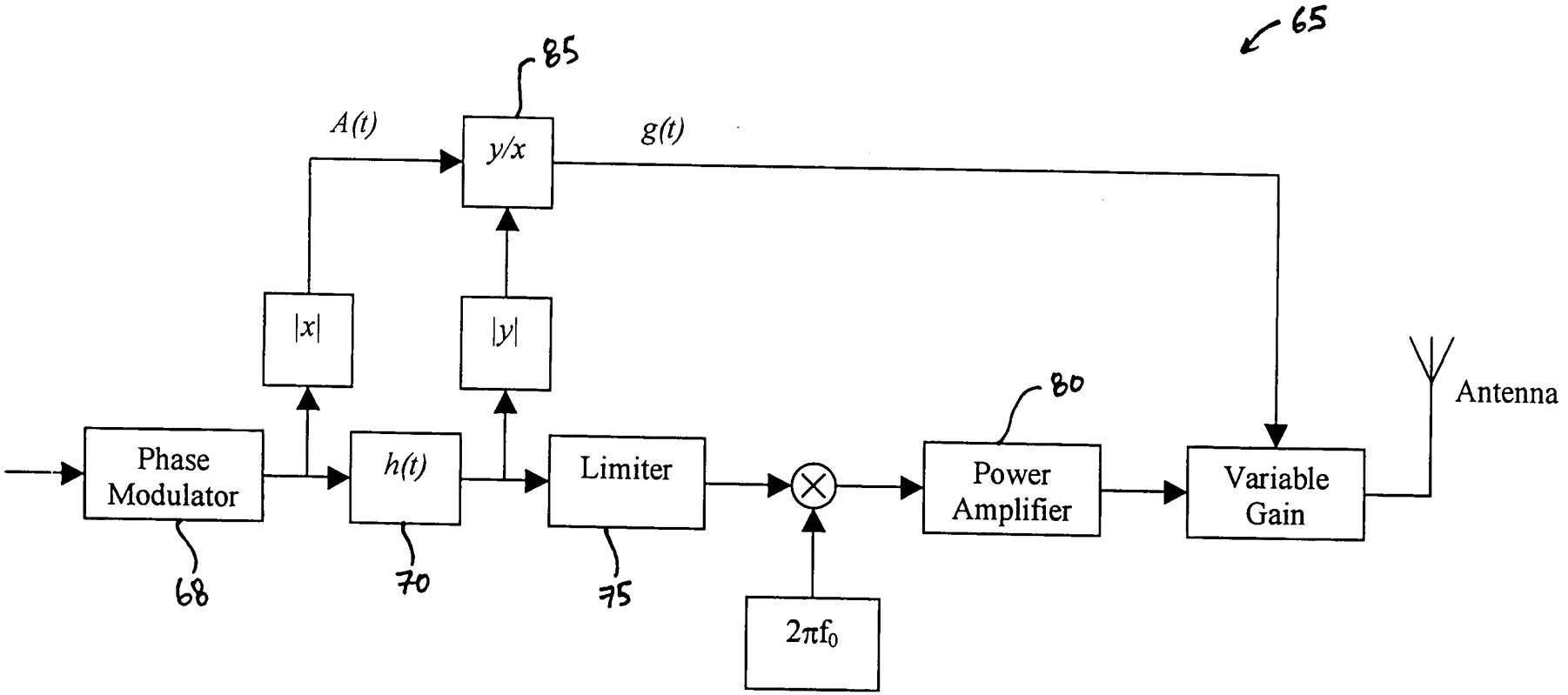
Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During
Wi[redacted]s Communications
Inv[redacted]'s Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723



Block diagram of a transmitter with two part polar filtering

FIG. 2

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During
Wir[redacted] Communications
Inve[redacted]'s Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723



Block diagram of transmitter illustrating the calculation of j(t) and g(t).

FIG. 3

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During [illegible] Wireless Communications
Inventor's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

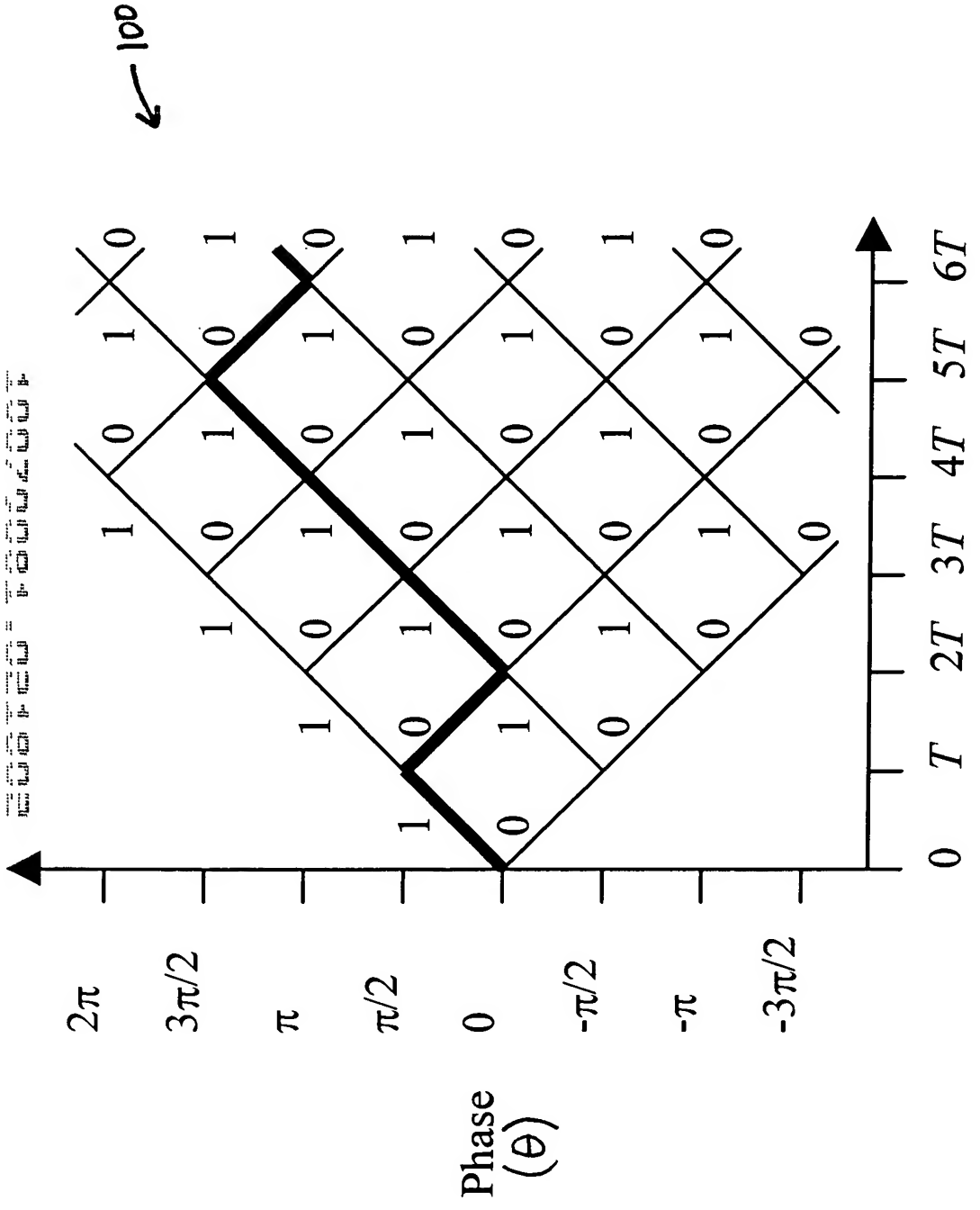


FIG. 4

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During Wireless Communications
Inventor's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

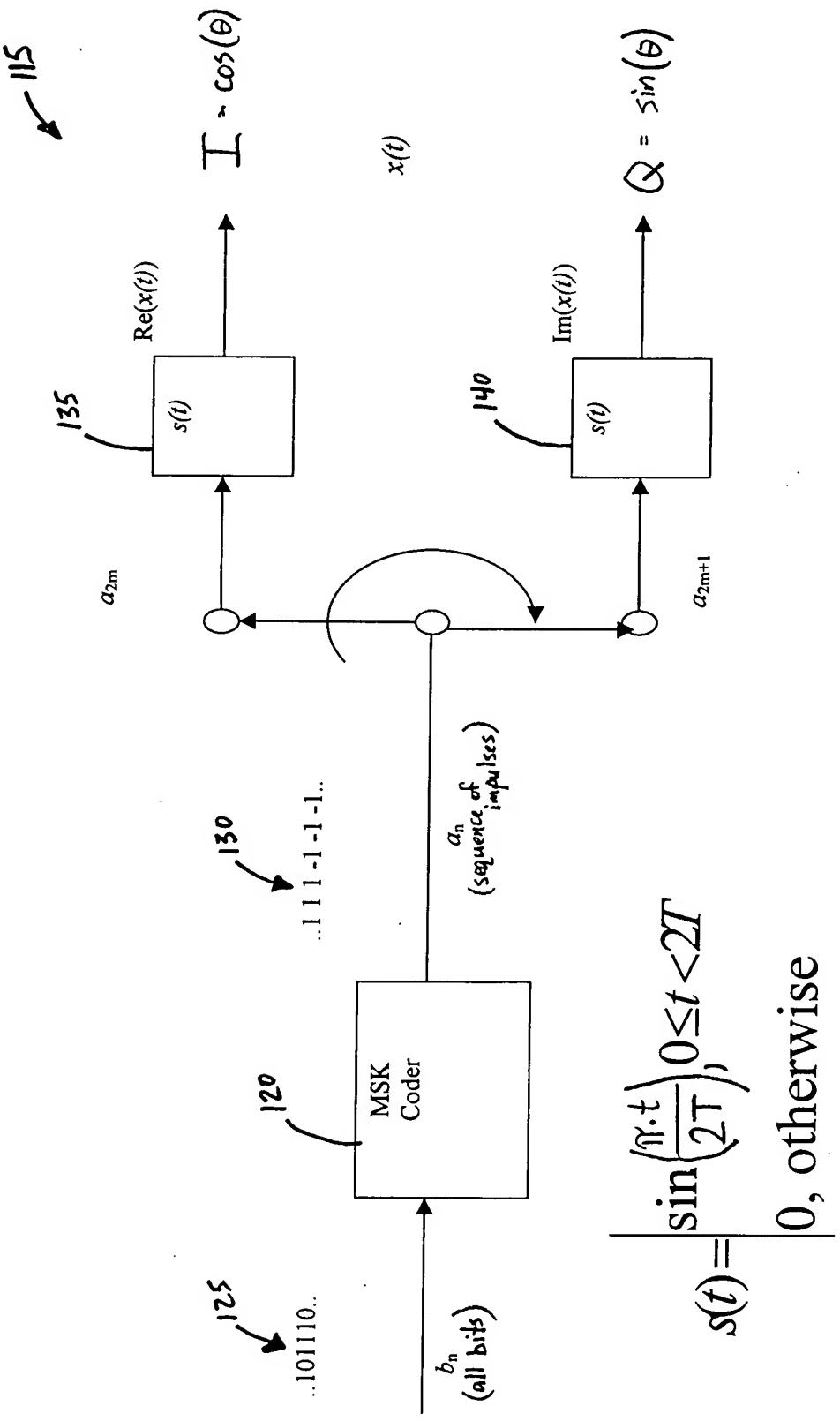


FIG. 5

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During Wi[redacted]ss Communications
In[redacted]or's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

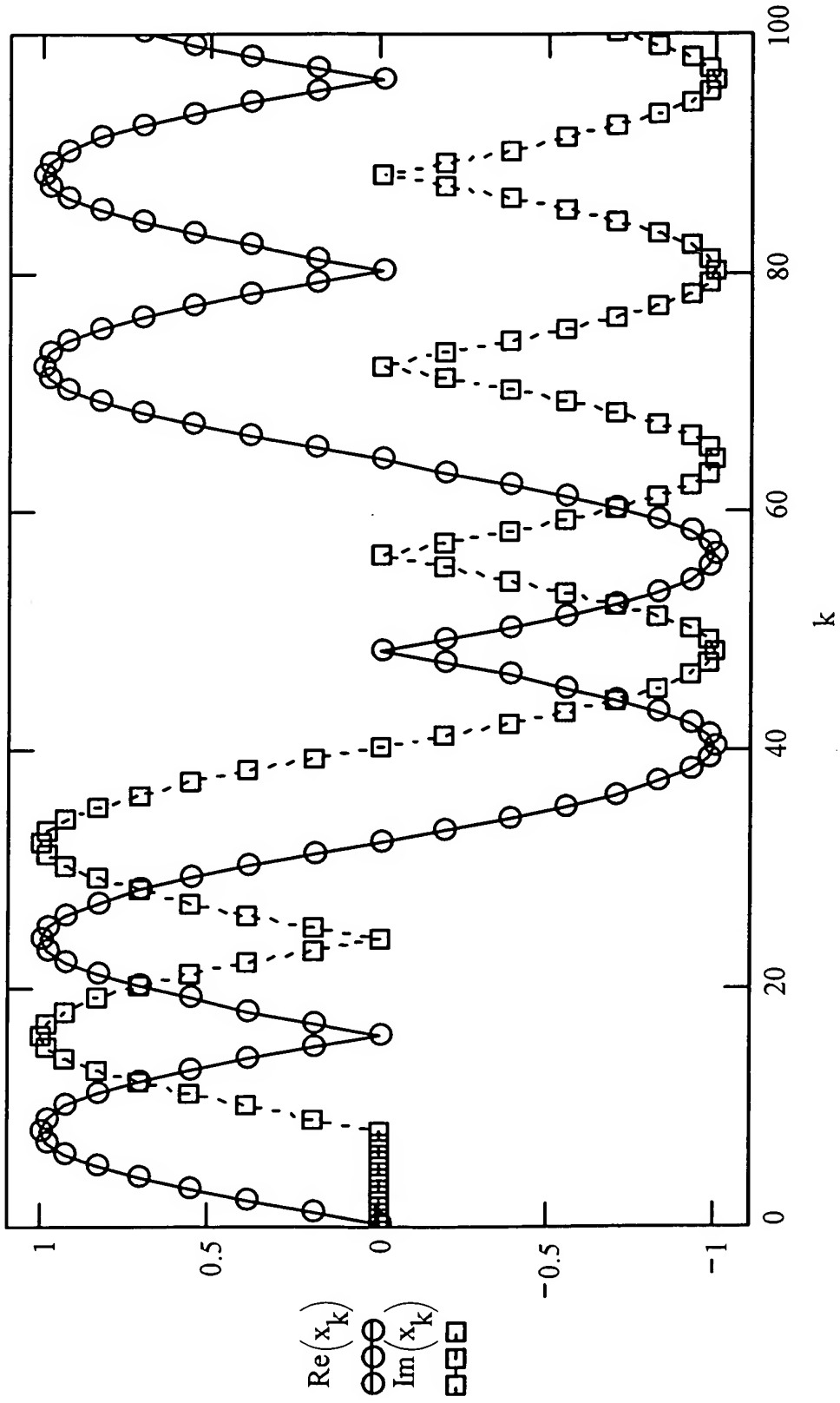


FIG. 6

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During Wireless Communications
Inventor's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

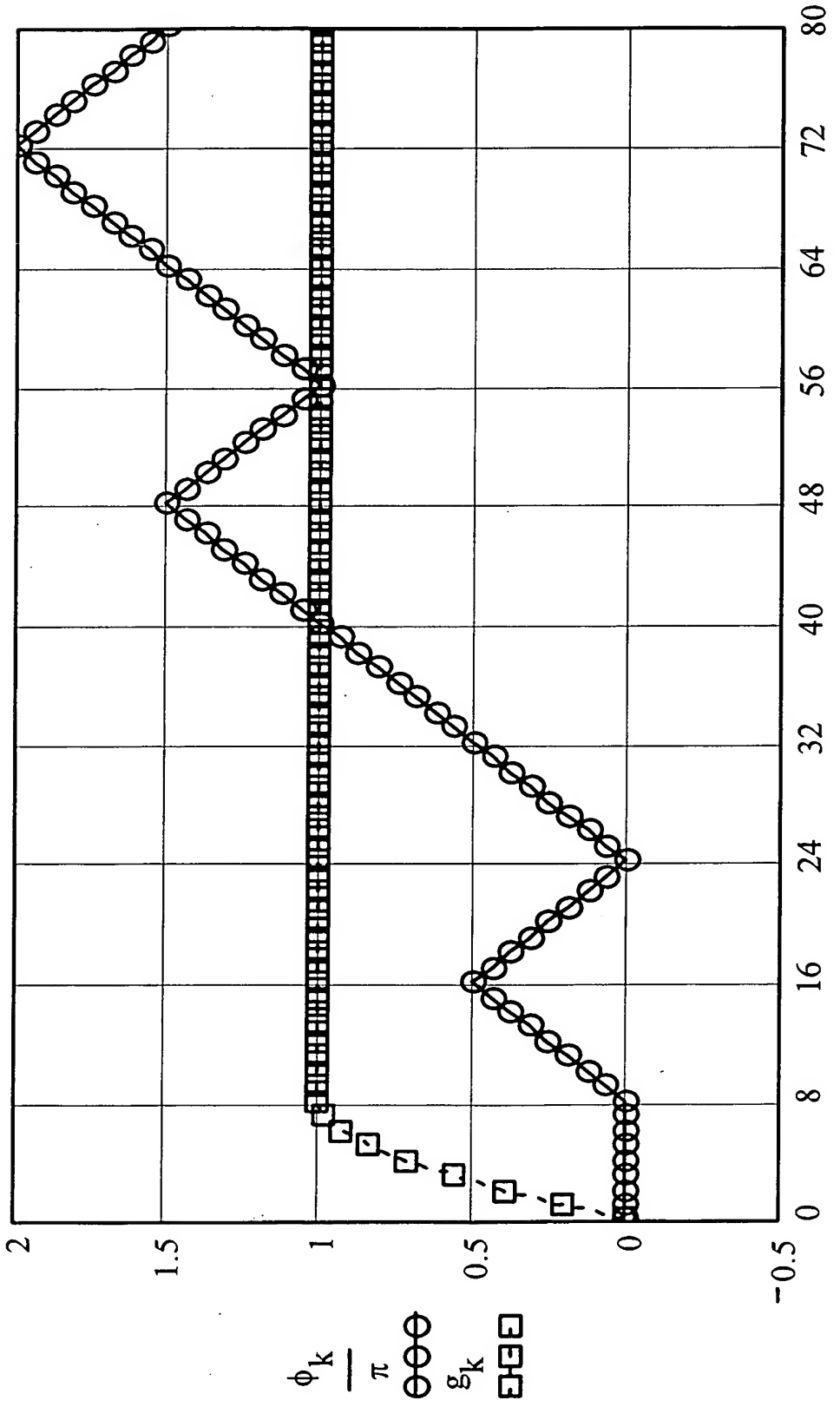


FIG. 7

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During Wireless Communications
Inventor's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

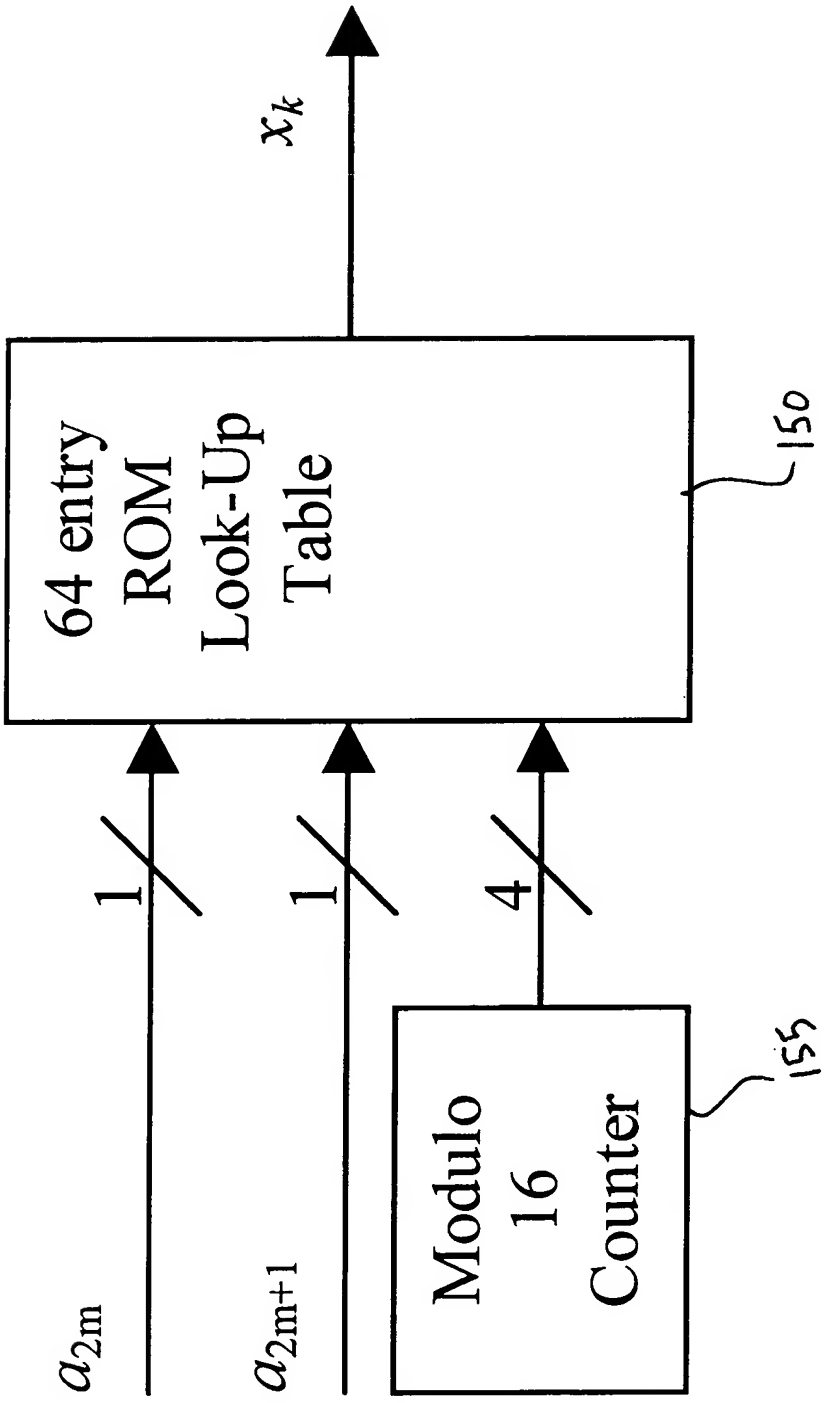


FIG. 8

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During Wireless Communications
Inventor's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

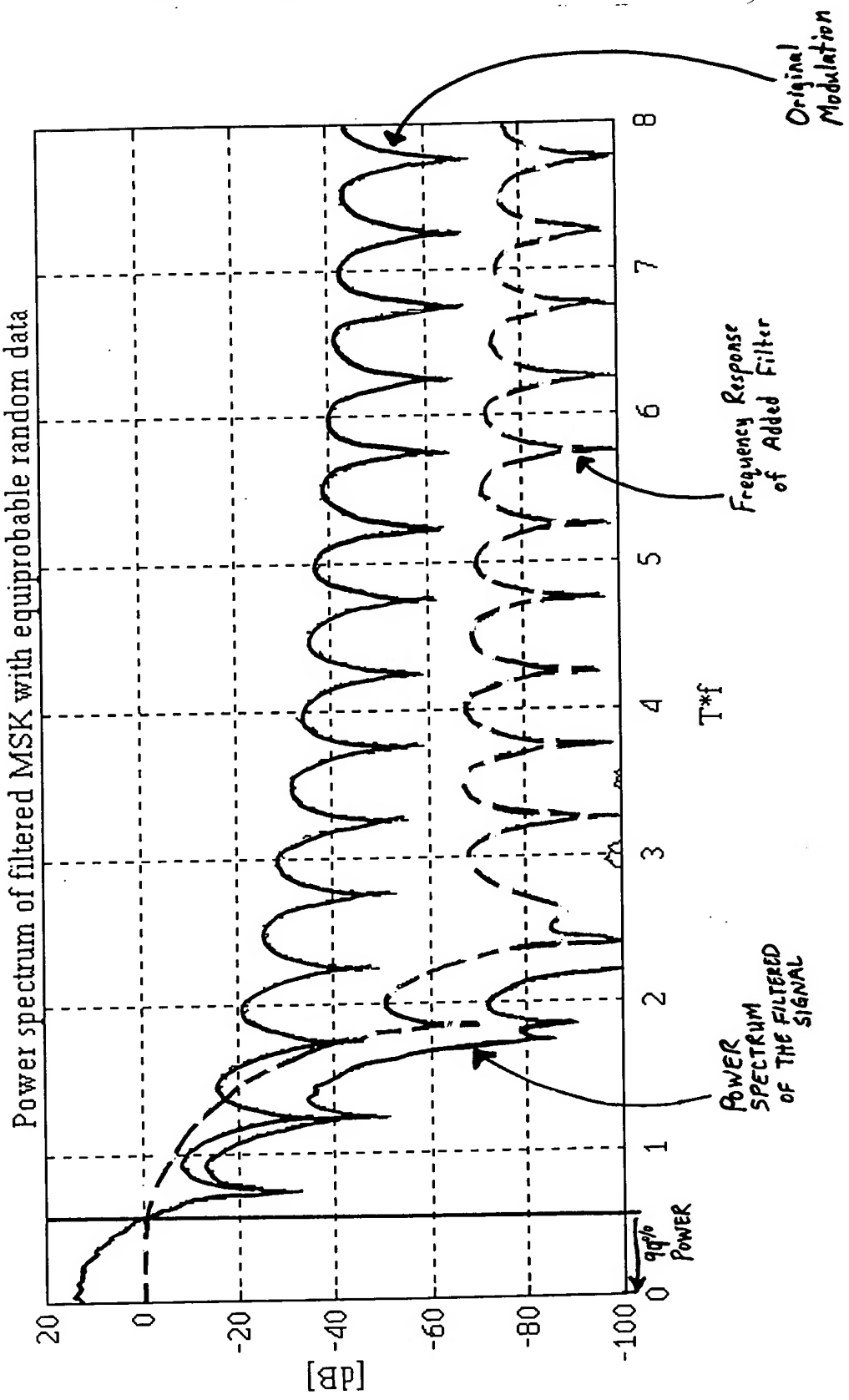


FIG. 9

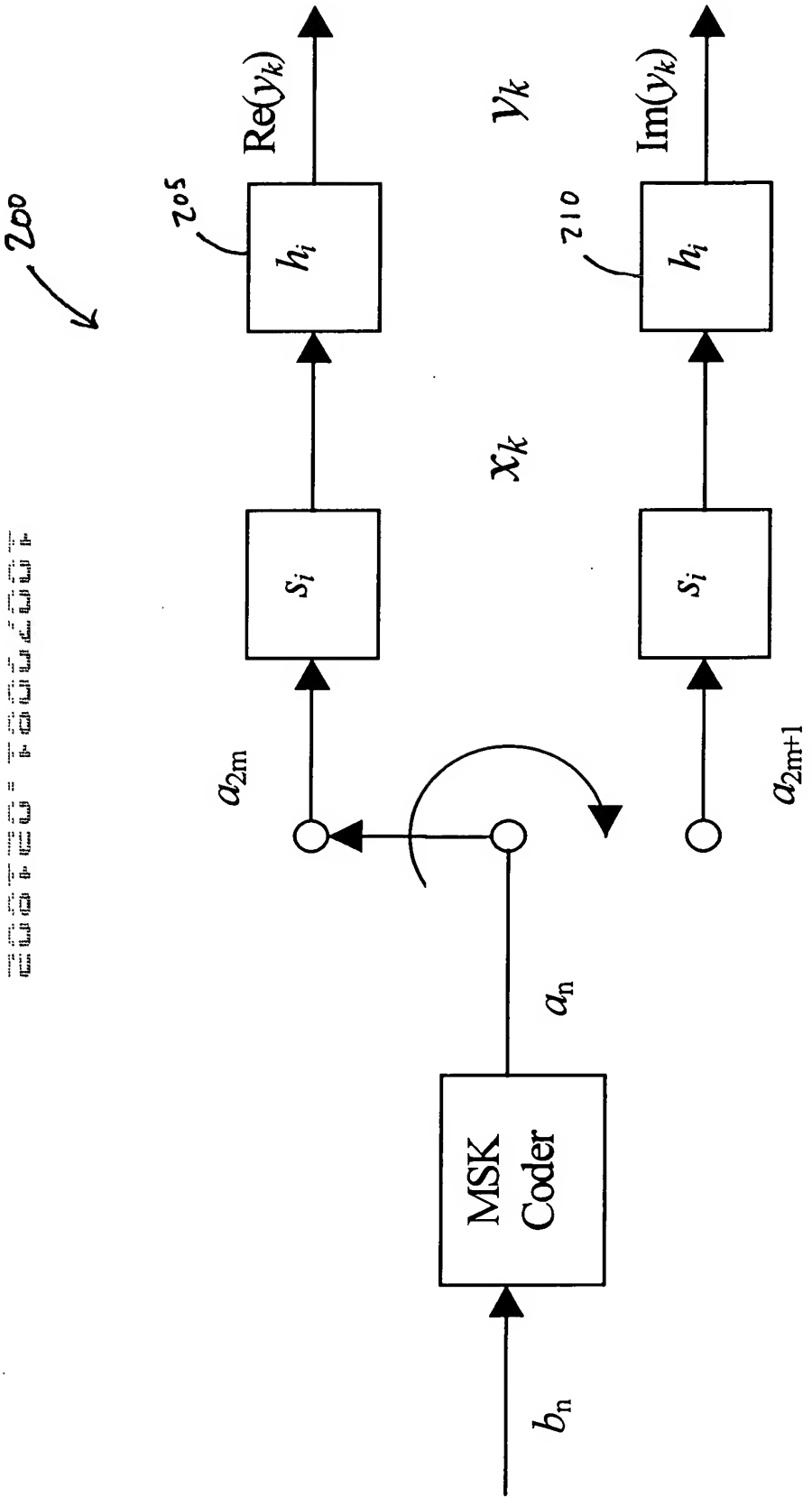


FIG. 10

Title of Invention: Transmitter and Associated Method for Reducing the Adjacent Channel Power During Wireless Communications
Inventor's Name: Peter B. Holmqvist
Attorney Docket Number: 38128/193723

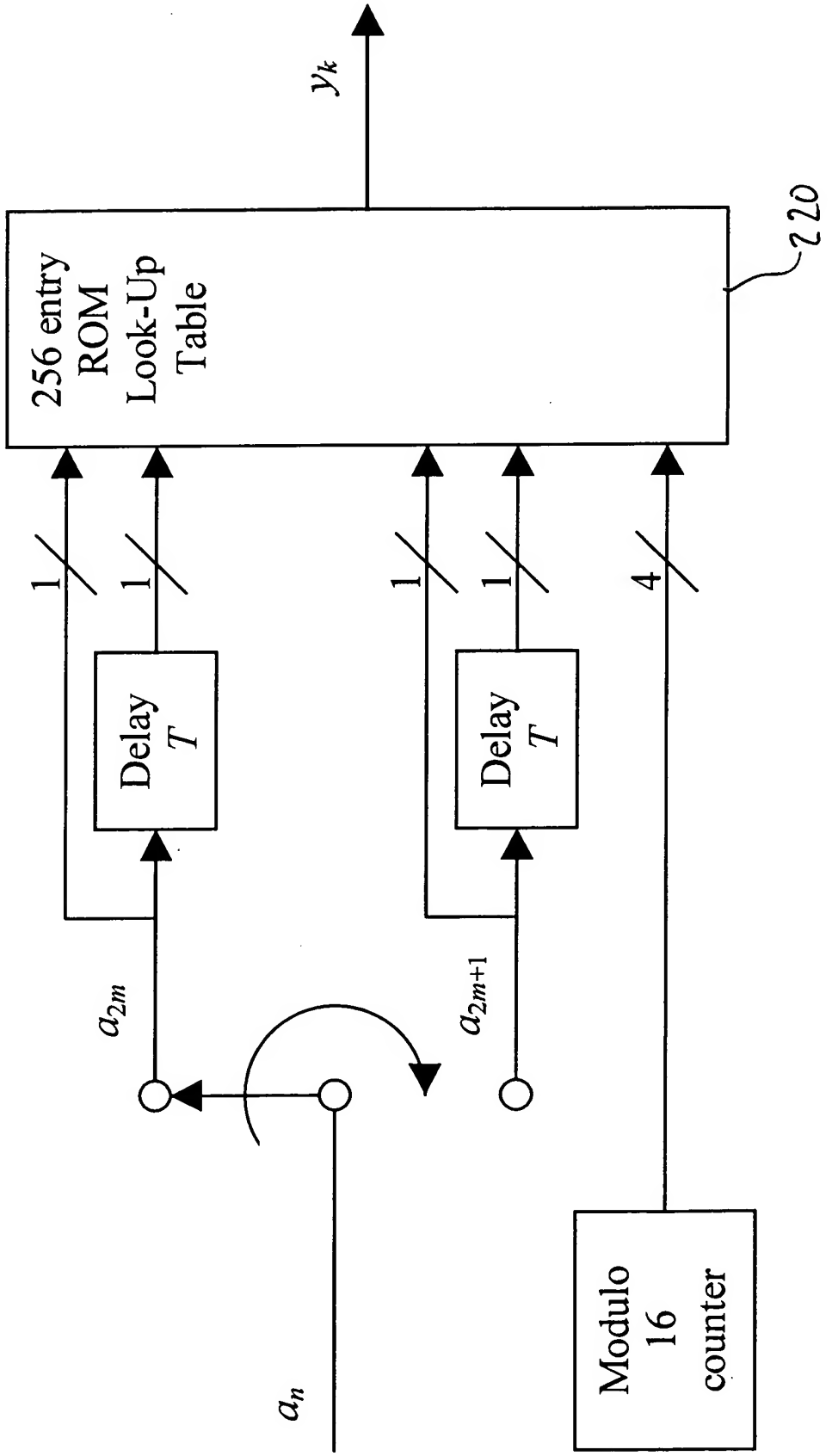


FIG. 11

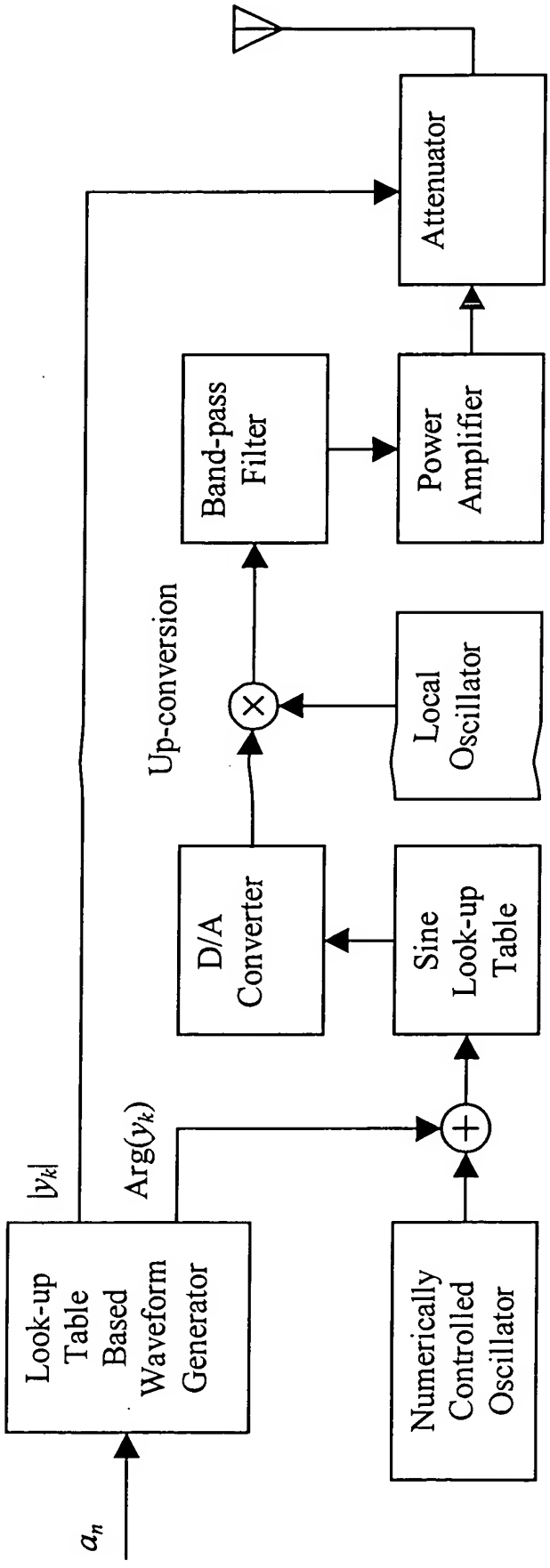

Look-up Table Based Waveform Generator
Numerically Controlled Oscillator
D/A Converter
Sine Look-up Table
Local Oscillator
Band-pass Filter
Power Amplifier
Attenuator
Up-conversion
a_n
$|y_k|$
$\text{Arg}(y_k)$

FIG. 12